University Hospitals

Title: Evaluation of Postoperative Esophagram Following Peroral Endoscopic Myotomy (POEM)

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Background

- A major complication following POEM is esophageal leak.
- Postoperative esophagrams are often utilized to evaluate for leak, but is not standard practice.
- Routine use of post-operative esophogram has come under scrutiny for multiple upper gastrointestinal surgeries such as bariatric surgery and other gastric resections.
- Our objective of this study was to evaluate the necessity of the postoperative UGI following POEM.

Methods

- Retrospectively analysis of 173 patients
- Adults that underwent POEM for diagnosed achalasia from 2010 to 2022.
- Stratified into postoperative esophagram vs. no esophgram
- Primary outcomes included complication rates (leak and aspiration), length of stay, and readmission rates.
- chi-square test and ANOVA

Results

- 173 patients that were included, 116 had a postoperative esophagram.
- There were no significant difference between the non-esophagram and esophagram groups
  - Leak rate (2.6% vs 0%, p = 0.55), aspiration rate (1.7% vs 3.5%, p = 0.60), complication rates (7.9% vs 5.5%, p = 0.75).
  - Readmission rate was 10.7% in non-esophagram versus 8.7% in esophagram group (p = 0.67).
  - Length of stay was 1.48 days in the non-esophagram group vs 1.76 days in the esophagram group (p = 0.37).

Figure(s)

	No Post-op Esophogram (N=57)	Post-Op Esophogram (N=116)	P-Value
Post-op Eckardt Score	1	0.781	0.39
Dysphagia Score	0	37 (80%)	69 (72%)	0.059
	1	3 (7%)	20 (21%)	
	2	6 (13%)	6 (6%)	
	3	0	1 (1%)	
Chest Pain Score	0	37 (80%)	79 (84%)	0.72
	1	8 (17%)	13 (14%)	
	2	1 (2%)	1 (1%)	
	3	0	1 (1%)	
Regurgitation Score	0	36 (78%)	80 (83%)	0.62
	1	8 (17%)	14 (15%)	
	2	2 (4%)	2 (2%)	
	3	0	0	
Weight Score	1	1 (20%)	2 (67%)	0.68
	2	2 (40%)	1 (33%)	
	3	2 (40%)	0	
Leak		0	3 (2.6%)	0.55
Complication		3 (5.5%)	9 (7.9%)	0.75
Length of Stay (Days)		1.48	1.76	0.37
ED presentation		3 (5.4%)	10 (8.8%)	0.55
Readmission		6 (10.7%)	10 (8.7%)	0.67

Conclusions

- No difference in outcomes for postoperative esophagram verses not.
- Suggests postoperative UGI following POEM should not be used routinely.
- Esophagram should be performed depending on the clinical signs/symptoms post-operatively that would warrant imaging and intervention.

References

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